

### **REMARKS**

Prior to entry of this amendment, claims 1-55 are currently pending in the subject application. By the instant amendment, claims 1-55 are canceled, without prejudice. Claim 56-85 have been added. Claims 74-85 have been withdrawn.

Claim 61 has been added to provide a claim that is generic to Species 2-4. Other limitations previously recited as a set of claims depending from a claim directed to each of these Species 2-4 are now set forth as dependent claims from claim 61, i.e., claims 62-67. Claims 74-85 have been regrouped for more convenient analysis regarding Species 2 and 5. No new matter has been added.

Claims 56-85 are presented to the Examiner for prosecution on the merits.

#### **A. Election of Species**

In the outstanding Office action, the Examiner has made an election requirement to the following species:

- Species 1: First Embodiment of Fig. 1;
- Species 2: Second Embodiment of Fig. 2;
- Species 3: Third Embodiment of Fig. 3;
- Species 4: Fourth Embodiment of Fig. 4; and
- Species 5: Fifth Embodiment of Fig. 5.

It is respectfully submitted that independent claim 56 (corresponding to original claim 1) is generic to Species 1-4 and independent claim 74 (corresponding to original claim 29) is generic to Species 2 and 5. As can be seen from the above, Species 1 and 5 are actually different combinations having a subcombination of Species 2 in common. The Applicant hereby elects examination of Species 2. It is respectfully submitted that claims 56-58, and 61-73 all read on Species 2, with claims 56 and 61-73 being generic to Species 2-4. Claim 59 is generic to Species 3 and 4, while claim 60 reads on Species 4. If the present application is allowable because of the limitations arising from Species 2, it is respectfully submitted that claims 75-81, which also read on Species 2, should also be allowable.

It is further submitted that requiring election between Species 2 or 3 and Species 4 is improper, since these are not mutually exclusive. In particular, Species 2 requires a material between the conductive plug and the resistant material, Species 3 requires a material between

the resistant material and the conductive plate, while Species 4 requires both. Therefore, if none of claims 56 and 61-73 are found to be allowable, consideration of claim 60 is respectfully requested.

B. Election of Sub-species

In the outstanding Office action, the Examiner also required an election within each of the embodiments listed above to sub-embodiments consisting of specific materials for each of the species, and required selection of one material for each element:

a) First material film 30: n-type poly silicon film, p-type poly silicon film, silicon oxide film, aluminum oxide film.

b) Second material film 32: n-type poly silicon film, p-type poly silicon film, silicon oxide film, aluminum oxide film.

c) Resistant material (amorphous dielectric film 26, 38): Silicon nitride film, aluminum oxide film.

d) Conductive plug 24: the conductive plug is the same material as the material of the source region (n-type poly silicon plug), the conductive plug is a gold plug, the conductive plug is a platinum plug.

The applicant has reduced the number of claims presented by reciting limitations regarding the materials in claims depending from the new generic claim reciting "means for improving data storage." This reduction is believed to ease any confusion arising from the previous inclusion of numerous sets of claims directed to the materials.

It is respectfully submitted that this sub-election is improper, as the materials noted above are recited in dependent Markush claims. Thus, there are no species claims to materials present. Election of a sub-species would include amending the claims. Further, claiming of these materials does not constitute such a multiplicity of species that an unduly extensive and burdensome search would be required. *See MPEP, § 808.01(a)*. Therefore, it is respectfully requested that the requirement that the materials for each component be selected be withdrawn.

C. Conclusion

Thus, Species 2 has been elected, and it is respectfully requested that the selection of materials requirement be withdrawn.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

Receipt of the initial Office action on the merits is awaited.

Respectfully submitted,

Date: August 23, 2004

*Richard A. Sterba Reg. No. 43,162*  
for Eugene M. Lee, Reg. No. 32,039

LEE & STERBA, P.C.  
1101 WILSON BOULEVARD, SUITE 2000  
ARLINGTON, VA 22209  
703.525.0978 TEL  
703.525.4265 FAX

PETITION and  
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.